

Claims

1. A method in an object oriented computer system, wherein objects are enabled to have relationships with each other, the
5 method comprising:

receiving a query for a path of related objects, the query including information regarding an object and relationships associated with the object;

10 analysing the different relationships associated with objects in the system to select objects based on said information included in the query; and

based on said analysis, selecting a path of related objects, one of the objects in the path being the object indicated by the query.

15 2. A method as claimed in claim 1, wherein the path of related objects extends between said one object and a root of a structure, said structure being arranged to organise objects relative to each other.

20 3. A method as claimed in claim 1, wherein the step of analysing comprises determination of the number of relationships each analysed object has with other objects.

25 4. A method as claimed in claim 3, comprising selection of an object based on the analysis as a starting point for further examination.

30 5. A method as claimed in claim 4, wherein an object with the lowest cost is selected for the further examination.

6. A method as claimed in claim 5, wherein the cost is determined for each analysed object based on the number of relationships each object has with other objects.

5 7. A method as claimed in claim 1, wherein the query comprises a string of name items.

8. A method as claimed in claim 7, wherein the string of name items is arranged in subsequent tokens, one token of the
10 string indicating a name of one object and another token adjacent to the one token indicating a name of another object, said other object being a direct or indirect child or parent for said one object.

15 9. A method as claimed in claim 4, wherein the further examination comprises comparing relationships associated with the selected object to information in the query.

20 10. A method as claimed in claim 7, wherein the string of name items is broken into tokens before the step of analysing.

11. A method as claimed in claim 1, wherein the objects are placed in different structures, the structures associating the objects with different relationships categories.

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12. A method as claimed in claim 11, wherein the queried object and at least one other object indicated by the query are associated with different structures.

30 13. A method as claimed in claim 1, wherein the objects are enabled to have more than one name.

FOOTNOTES

14. A method as claimed in claim 13, wherein the different names for an object are indicated by aspects of the object.

15. A method as claimed in claim 11, wherein an object is placed in more than one location in the structures.

16. A method as claimed in claim 11, wherein the query contains information regarding at least one structure with which the object is expected to associate with.

17. A method as claimed in claim 4, comprising the step of selecting a second object in the event that it is determined impossible to select the queried path of related objects based on said one selected object.

18. A method as claimed in claim 17 when appended to any of claims 3 to 12, wherein the step of selecting the second object comprises selection of an object with a different number of relationships than what said one object has.

19. A method as claimed in claim 7, wherein the string of name items comprises at least one symbol between the name items.

20. A method as claimed in claim 19, wherein the at least one symbol describes the relation between the objects the said at least one symbol associates with.

21. A method as claimed in claim 1, wherein the scope of the search performed in response to the query is limited by information in the query.

22. A method as claimed in claim 1, wherein the scope of the search accomplished in response to the query is limited by defining limitations to the search scope.

23. A method as claimed in claim 1, comprising a step of selecting objects for the analysis of the relationships based on the information included in the query.

24. A computer program comprising program code means for
10 performing any of steps of claim 1 when the program is run on
a computer.

25. A computer program as claimed in claim 24, the program code means being stored in a computer readable medium.

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26. Use of a computer program as claimed in claim 24 for finding an object in a computerised control system.

27. A method in a computerised control system, comprising:
20 associating objects representing real world entities to
different relationship groups based on characteristics of the
real world entities;

initiating a search for an object by means of a query string containing information regarding the object;

25 searching for the object based on a name associated with the object, relationships the object has with other objects and information that associates with relationship groups relevant for the searched object; and

selecting a path of related objects that corresponds
30 information in the query string and includes the searched
object.

28. A data processing system comprising:

a processor adapted for object oriented data processing;
data storage means adapted for storing data objects, the
objects being enabled to have relationships between each other
and to be associated with different relationship groups;

5 wherein the data processing system is adapted to provide
the processor with an indication of the location of an object
in the data storage means based on information regarding a
name associated with the object, relationships the object has
with others of the objects, and the relationship groups.

10 29. A data processing system as claimed in 28, wherein the
indication is based on a path of related objects, the object
being one object on the path of related objects.

15 30. A data processing system as claimed in 28, wherein the
processor is adapted to generate a query containing
information regarding the object and at least one other object
having a relationship with the object.

20 31. A data processing system as claimed in claim 28, wherein
the processor is adapted to control operation of a system
consisting of real world entities, the real world entities
being represented by objects stored in the storage means.

25 32. A computer data signal embodied for communication in a
computerised system, the communication being associated with
location of objects in data storage means of the system, and
the objects being enabled to have relationships between each
another and be associated with different relationship groups,
30 wherein the data signal comprises information associated with
a location of an object in the data storage means based on
information regarding a name associated with the object,

relationships the object has with others of the objects, and the relationship groups.

33. A computer data signal as claimed in claim 32, wherein
5 the information comprises at least one path of related objects, the object being one of the objects on said at least one path of related objects.

34. A computer data signal as claimed in claim 32, wherein
10 the computer data signal is generated at a search function of the computerised system to respond to a query signal, said query signal containing information regarding the object and at least one other object having a relationship with the object.

35. A computer data signal as claimed in claim 32, wherein
15 the computerised system is adapted to control, based on the computer data signal, operation of a system consisting of real world entities, the real world entities being represented by
20 objects stored in the storage means.

36. A method in an object oriented computer system wherein objects are enabled to have relationships with each other, the method comprising:

25 receiving a query for a path of related objects, the query including information regarding an object and relationships associated with the object;

analysing the different relationships associated with objects in the system to determine the number of relationships
30 each of the objects has with other objects; and

based on said analysis, selecting a path of related objects, one of the objects in the path being the object indicated by the query.